

Remarks

Reconsideration and allowance of the subject patent application are respectfully requested.

The title of the application has been changed along the lines kindly suggested by the Examiner.

Claims 1, 3-5, 9, 10 and 12 were rejected under 35 U.S.C. Section 102(b) as allegedly being "anticipated" by JP 3-270156. While not acquiescing in this rejection or in the characterizations of JP 3-270156 made in the office action, claim 1 has been amended. As such, the discussion below is with reference to amended claim 1.

JP 3-270156 discloses forming grooves 12 in the main surface 11 of a semiconductor wafer 10. *See* Figure 1(a). A protective film 13 is then formed on the main surface 11. *See* Figure 1(b). An etching operation is then executed from the rear of the semiconductor wafer to divide the semiconductor wafer 10 into individual chips 15 and to etch the side-face parts of the individual chips. Claim 1 describes that the protective layer is bonded to the semiconductor wafer using a bonding agent having a chemical etching resistant property. As discussed in the present application at page 31, lines 18-23, the application of a bonding agent having a chemical etching resistant property can, for example, inhibit etchant from entering the bonding face of the semiconductor wafer and from etching the front face. This feature is not disclosed in JP 3-270156 and thus JP 3-270156 cannot anticipate claim 1. *See, e.g., Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.").

Claims 3-5, 9, 10 and 12 each depends directly or indirectly from claim 1.

Applicant does not acquiesce in the contentions in the office action regarding these dependent claims. In any event, these claims are not anticipated by JP 3-270156 because of their dependency from claim 1 and because they recite additional patentable features.

Claim 2 was rejected under 35 U.S.C. Section 103(a) as allegedly being "obvious" over JP 3-270156, and further in view of applicant-admitted prior art JP 7-022358. JP 7-022358 is alleged to demonstrate testing prior to semi-full dicing. However, even assuming for the sake of argument that there would have been motivation to provide such testing in the process of JP 3-270156, JP 7-022358 does not remedy the deficiencies of JP 3-270156 with respect to claim 1 (from which claim 2 depends). Accordingly, Applicant submits that claim 2 is allowable.

Claims 11 and 13-19 were rejected under 35 U.S.C. Section 103(a) as allegedly being obvious over JP 3-270156, and further in view of Usami *et al.* (U.S. Patent No. 5,893,746). Usami *et al.* discloses a method of forming a semiconductor device in which a thin semiconductor wafer 105 is placed on a tape 107 held with a frame 101. This semiconductor wafer 105 is completely cut off by means of dicing grooves 104 and separated into a plurality of chips 105'. The separated chips 105' are pushed upwardly from the back side of tape 107 by means of a heating head 106 and is urged against a substrate 102 on which an adhesive 103 has been preliminarily applied, thereby causing the chip to be thermally bonded to the substrate 102. Among other things, Usami *et al.* does not remedy the above-identified deficiencies of JP 3-270156 with respect to claim 1 (from which claims 11 and 13-19 depend). As such, Applicant submits that claims 11 and 13-19 are allowable. In addition, these claims contain other patentable features.

Applicant does not acquiesce in the contentions in the office action regarding claims 11 and 13-19. By way of example without limitation, neither JP 3-270156 nor Usami *et al.* discloses that the protective layer holding means includes draining means for draining etchant (claim 18) or that the draining means is formed as grooves extending in a radial manner (claim 19). The Examiner asserts that the specification allegedly contains “no disclosure of either *the critical nature of the claimed draining means or any unexpected results arising therefrom.*” First, this assertion is not relevant to the obviousness of claims 18 and 19. Second, the specification clearly describes benefits of an example draining means at page 63, line 7 to page 64, line 3. The Examiner then asserts that the draining means is “inherent.” Applicant submits there is no documentary evidence to support this contention regarding draining means, much less regarding draining means in the form of radial grooves as specified in claim 19. As such, the office action fails to set forth a *prima facie* case of obviousness. *See* MPEP Section 2142. Applicant requests that documentary evidence be provided to support any asserted conclusion of obviousness should the rejection of these claims be maintained.

New claims 43-49 have been added. The subject matter of these new claims is fully supported by the original disclosure and no new matter is added. Claim 43 and claims 44-49 which depend therefrom are believed to allowable for reasons similar to those expressed above.

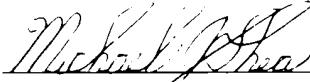
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The pending claims are believed to be in condition for allowance and early notification to that effect is respectfully requested.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 

Michael J. Shea

Registration No. 34,725

1100 North Glebe Road, 8th Floor
Arlington, Virginia 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100
MJS:dbp